CELTIC-NEXT
AUTUMN CALL 2026
eureka clusters

VUEREAL

25 September 2026 PROPOSERS' BROKERAGE DAY

MicroLink

Blue MicroLED Optical I/O

Custom emitters. Fiber bundles. A working glass-interposer proof of concept.

600+
Patent applications

225+
Patents

USD $100M+
Funding

50+
Employees

VUEREAL TECHNOLOGY CONTRIBUTION

01 CUSTOM EPI IP

Speed-led AR1; efficient AR2.
Custom blue optical-I/O epi.

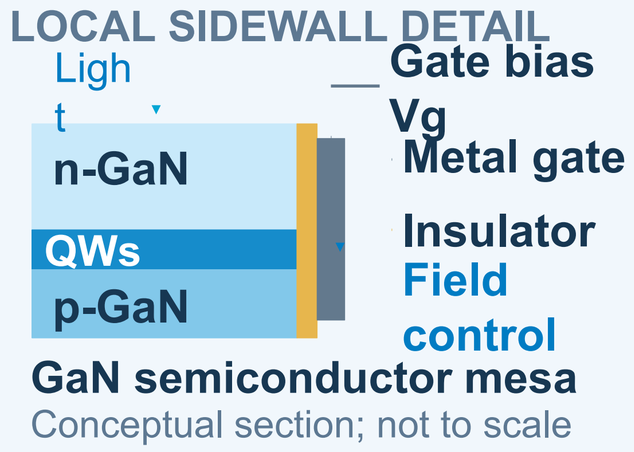
02 SEMIPOLAR EPI

Lower polarization fields.
Stronger carrier overlap.

03 MIS FIELD CONTROL

Metal-insulator-semiconductor

A separately biased gate acts through an insulator to control carriers and trap-assisted loss at the GaN sidewall.
Goal: lower sidewall loss.



Test efficiency AND bandwidth; include gate capacitance, leakage and bias power.

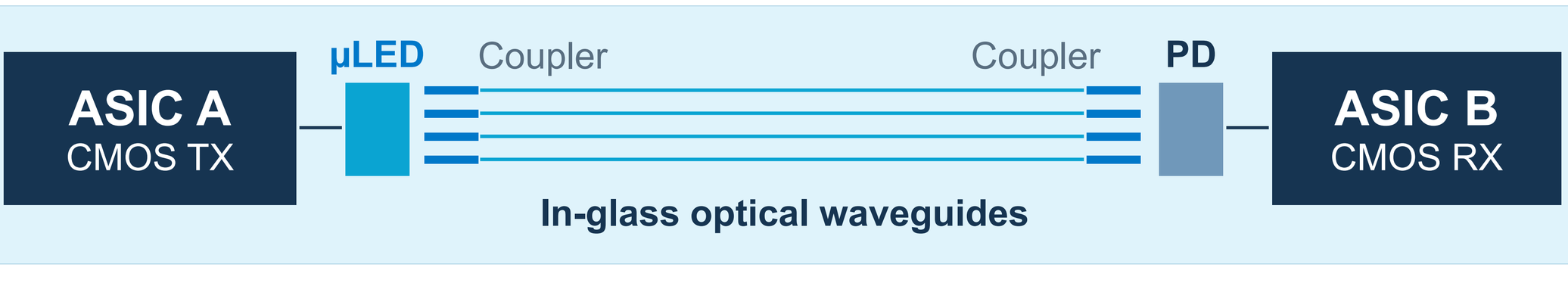
01 | Metalens-coupled fiber-bundle link



Hexagonal fiber-core array; metalenses maximize useful coupling.

02 | Glass-interposer optical I/O

A working optical link between two ASICs in one glass interposer.



IN-PACKAGE OPTICS

Optical conversion beside logic; shorter electrical links.

CO-DESIGNED PLATFORM

MicroSolid Printing™ + CMOS; hybrid bonding + glass optics.

PARALLEL OPTICAL I/O

Scale with optical lanes; measure complete-link energy.

36 MONTHS: FROM CO-DESIGN TO A WORKING SYSTEM

M1–6
Co-design
Budget + interfaces

M7–15
Test vehicles
Epi, CMOS + glass

M16–24
Integration
Hybrid bonds + fiber

M25–36
Glass POC
Two-ASIC validation

PARTNERS: HYBRID BONDING + PROCESSING | CMOS
BLUE OPTICS + GLASS INTEGRATION | CUSTOM EPITAXY

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